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SAFE-T-THERM® Classic Biobased Product Data Sheet

Inhibited Propylene Glycol Based Heat Transfer Fluid

SAFE-T-THERM® Classic Biobased is an inhibited propylene glycol based fluid designed for use in all hydronic systems where freeze and corrosion protection is required. The SAFE-T-THERM® Classic Biobased formula includes 95% propylene glycol produced from a totally renewable process which converts glycerine produced by biofuel production into propylene glycol.

SAFE-T-THERM® Classic Biobased includes a green dye, for leak detection. SAFE-T-THERM® Classic Biobased is designed to protect components commonly found in residential and commercial systems. SAFE-T-THERM® Classic Biobased can also be used with aluminum at temperatures below 150°F (66°C). At temperatures above 150°F (66°C), use of SAFE-T-THERM® Classic Biobased is not recommended because the inhibitors will not fully protect aluminum components in the system. SAFE-T-THERM® Classic Biobased should not be used with galvanized steel or Chlorinated polyvinyl chloride (CPVC).

Recommended use temperature range: -50°F (-45°C) to 230°F (110°C)

For health and safety information for this product, contact Houghton for a Material Safety Data Sheet (MSDS).

SAFE-T-THERM® Classic Biobased Typical Properties by Concentration

Properties ¹	Conc.	60%	50%	40%	35%	30%	25%
Propylene Glycol	96%	60%	50%	40%	35%	30%	25%
Performance Additives and Water	4%	40%	50%	60%	65%	70%	75%
Appearance	Liquid, Clear, Green	Liquid, Clear, Green	Liquid, Clear, Green	Liquid, Clear, Green	Liquid, Clear, Green	Liquid, Clear, Green	Liquid, Clear, Green
Specific Gravity (15/15°C 60/60°F)	1.055 - 1.065	1.050 - 1.059	1.043 - 1.054	1.035 - 1.042	1.034 - 1.042	1.029 - 1.038	1.024 - 1.034
pH 50% glycol	9.0 - 10.5	9.0 - 10.5	9.0 - 10.5	9.0 - 10.5	9.0 - 10.5	9.0 - 10.5	9.0 - 10.5
Reserve Alkalinity (min)	12	6	6	4	4	3	3
Freeze Point Max	-22°F / -31°C (as 50%)	-49°F / -45°C	-22°F / -31°C	-4°F / -20°C	4°F / -16°C	10°F / -12°C	15°F / -10°C

¹Concentrate based on volume of Propylene Glycol, mixtures based on volume of SAFE-T-THERM® Classic Biobased

Typical properties, not to be construed as specifications. As use conditions are not within its control, Houghton does not guarantee results from use of the information or products herein; and gives no warranty, express or implied.

NOTE: These figures are examples only and may not be appropriate to your situation. Generally, for an extended margin of protection, you should select a temperature in this table that is at least 3°C (5°F) lower than the expected lowest ambient temperature. Houghton Chemical Corporation recommends a minimum glycol concentration of 25%. At lesser concentrations, the likelihood of bacteria growth increases. Also, at less than 25% concentrations there may not be enough inhibitor present to prevent corrosion of the system metals. Additional inhibitors and/or a biostat can be purchased from Houghton Chemical Corporation.

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Date Revised: February 19, 2014

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